



**Religious Struggles after Typhoon Haiyan: A case study
from Bantayan Island**

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1. Introduction

After the experience of disaster, studies have shown that many people feel closer to God, contrary to the popular belief that individuals may lose faith after disasters (Aten et al., 2008; Aten et al., 2012). Survivors who already hold a faith often find that it helps them cope with the trauma and stress of a disaster (Subandi et al., 2014; Koenig, 2006; Meisenhelder and Marcom, 2004; Schuster et al., 2001). Further, some secular individuals may be drawn to religion in the post-disaster context, in order to seek some form of comfort (Gray and Wegner, 2010). For example, Sibley and Bulbulia (2012) found that religious conversion rates among those who were personally impacted by the 2011 Christchurch earthquake in New Zealand were significantly higher than among those who were not impacted. This suggests that religion and faith may be important in helping individuals cope during the post-disaster period.

Although evidence suggests that the majority of survivors use their faith to help cope with the trauma of a disaster, a small proportion of individuals may experience religious struggles. Religious struggles “refer to experiences of tension, strain, and conflict about spiritual matters within oneself, with others, and with God” (Pargament, 2008, p. 17). For religious struggles relating to one’s relationship with God, responses may range from feelings of confusion and anger towards God, questioning God’s sovereignty and benevolence, to loss of faith and apostasy (Exline et al., 2001; Aten et al., 2012; Seirmarco et al., 2012). As having a “connection with God is of ultimate value” to many who are religious (Hill and Pargament, 2003, p. 67), an encounter that challenges one’s assumptions about and relationship with God could have a significant impact on emotional and psychological well-being (Abu-Raiya et al., 2016; Cook et al., 2013). Feelings of anger towards God after traumatic events have been linked to a variety of negative physical and psychological symptoms, including: depressive thoughts and poorer adjustment (Exline et al., 2011); complicated grief, posttraumatic stress disorder and major depressive disorders (Seirmarco et al., 2012); and reduced health outcomes (Sibley & Bulbulia, 2012). This suggests that it is particularly important to provide relevant support and care during post-disaster recovery to those of faith who may be struggling with their relationship with God.

This study examines religious struggles among Christian survivors of the 2013 Typhoon Haiyan on Bantayan Island, Cebu province in the Philippines. The study focuses on struggles in relationship of individuals with God, including feelings of anger and confusion towards God. For those who expressed these emotions, the study examines whether any specific demographic characteristics or experiences during the disaster may have contributed to these responses, to help consider how post-disaster programming can support faith-based recovery.

2. Background Literature

Disasters cause significant damage and destruction, including loss of life, injury and disruption of livelihood activities, as well as causing significant emotional and psychological trauma (Aten et al., 2012; Wilson and Moran, 1998). During the post-disaster recovery period, survivors need to rebuild their homes and lives, while trying to make sense of their experiences (Cook et al., 2013).

Many studies have highlighted how faith, religious beliefs, and spiritualityⁱ represent key mechanisms that contribute to how individuals, families and communities respond to, and recover from disasters (see IFRCRCS, 2014). Research has highlighted how faith and religion can help survivors to: interpret, explain, and understand a disaster event (Alshehri et al., 2013; Falk, 2010; Grandjean et al., 2008; Joakim and White, 2015; Merli, 2010; Schlehe, 2010; Simpson, 2011; Weaver et al., 2003), thereby providing some comfort, purpose and meaning to suffering (Abbott, 2013; Alawiyah et al., 2011; Gunn, 2007; Sibley and Bulbulia, 2012; Stephens et al., 2012); help cope with suffering and trauma (Aten et al., 2008; Exline et al., 2011) through a variety of religious coping methods (e.g. prayer, meditation, rituals) (Chester et al., 2008; Falk, 2010; Hill and Pargament, 2003; Subandi et al., 2014; de Silva, 2006); bring solidarity to disaster-affected communities (Aijazi and Panjwani, 2015; von Vacano and Schwarz, 2014); assert legitimacy, dignity, and independence and to navigate unequal relationships between survivors and relief responders (Aijazi and Panjwani, 2015; Merli, 2010); and provide shelter and material support to help with the relief and recovery process (Alawiyah et al., 2011; Joakim and White, 2015; Koenig, 2006; de Silva, 2006).

While religious beliefs can impact on how individuals and communities cope with, and respond to a disaster, the experience of a disaster may also impact on a survivor's faith and relationship with Godⁱⁱ. For example, after Hurricane Katrina, Aten et al. (2008) found that Christian respondents felt God was distant, and many questioned God in their attempt to make sense of their disaster experience. Exline et al. (2011) noted that anger towards God was a common response to a range of negative events among

participants in the United States. After an earthquake in Greece, approximately 10% of respondents, particularly males, expressed feelings of anger and vengeful thoughts towards God for not protecting them from danger (Roussos et al., 2005). These findings reflect religious struggles with God, whereby a crisis or traumatic event can shake the core of an individual's beliefs because it represents a "threat to one's deepest values, commitments, and world view" (Abu-Raiya et al., 2016, p. 1271).

A number of personality characteristics and personal experiences have been linked to religious struggles. Exline et al. (2001, p. 137) found that "anger toward God was linked with perceptions of severe harm, seeing God as responsible for the event, viewing God's actions as cruel and not kind, and difficulty finding meaning". The degree of loss and severity of trauma have been linked to more negative God concepts (e.g., viewing God as worthless or wrathful) and decreased importance of religious beliefs (Aten et al., 2012; Seirmarco et al., 2012). Interestingly, in a study of Norwegian tourists who experienced the 2004 Indian Ocean tsunami, the severity of disaster exposure was a key factor linked to both stronger and weaker religious beliefs in the post-disaster context (Hussain et al., 2011). Further, Cook et al. (2013) found that how individuals engage with their religion, particularly whether individuals maintained a positive relationship with God (as opposed to general religiousness), was an important variable for explaining positive adjustment and buffering of losses associated with a disaster. These studies highlight the complexity of interacting and complicating factors that can influence how a traumatic experience such as a disaster can influence one's relationship with God.

There is some evidence that those who experience religious struggles may experience stress-related growthⁱⁱⁱ, suggesting that a disaster experience, although impacting faith and relationships with God, can lead to longer-term benefits (Abu-Raiya et al., 2016; Abbott, 2013; van der Kolk et al., 2006). This is similar to findings on post-traumatic growth, where those who implement effective coping strategies to deal with the stresses and loss associated with trauma may have positive outcomes, even though there may be negative experiences in the immediate post-disaster context; this is particularly the case where a traumatised individual is struggling to re-integrate with a compassionate faith community that wants to provide support (Abbott, 2012; Cook et al., 2013). Thus, it is important to remember that although some individuals may struggle with their faith in the short-term, this could be part of a religious journey and that there may be longer-term benefits.

The literature suggests that there are a variety of factors, influences and complicating factors that can impact the experience of religious struggles. Considering the

importance of contextual factors in disaster events (for example, see the work of Cutter, 1996; Joakim and White, 2015; Wisner et al., 2004), better understanding of the experience of religious struggles after different disasters will help improve knowledge of the interface between faith and disaster coping mechanisms (or lack thereof). This information will also enhance our understanding of how humanitarian and faith-based organizations can help support emotional and psychological recovery among disaster-impacted populations, particularly those who experience struggles with God. Thus, this study examines religious struggles, particularly focusing on the relationships of survivors with God, after the 2013 Typhoon Haiyan disaster that struck the Visayas region of the Philippines.

3. Methods

The research was conducted using a quantitative survey with questions adapted from a number of different sources: the Emotions and Belief after Trauma (EBAT) questionnaire (see Başoğlu, 2000; Salcioglu, 2004); LifeWay (see Roach, 2013); and the PRRI/RNS Religion News Survey. Further questions were developed by the authors to capture relevant concepts^{iv}. Although the questions that focused explicitly on post-disaster relationship with God were not taken from the Religious and Spiritual Struggles Scale (RSS) developed by Exline et al. (2014), many of the questions are similar to the 'Divine' sub-scale within the RSS, which focus on beliefs about God and the perceived relationship with God. The RSS has shown good reliability and validity, suggesting that our survey questions are also likely to be reliable and valid (Exline et al., 2014).

A total of 74 questions were included focusing on: attribute data; damage experienced after Typhoon Haiyan; religiosity and strength of beliefs; disaster blame and God; God control; responses to God after the disaster; the role of prayer, religious leaders, and the church; and religious comfort. Research participants responded along a Likert scale ranging from 1 ('not at all typical of me') to 5 ('very much typical of me').

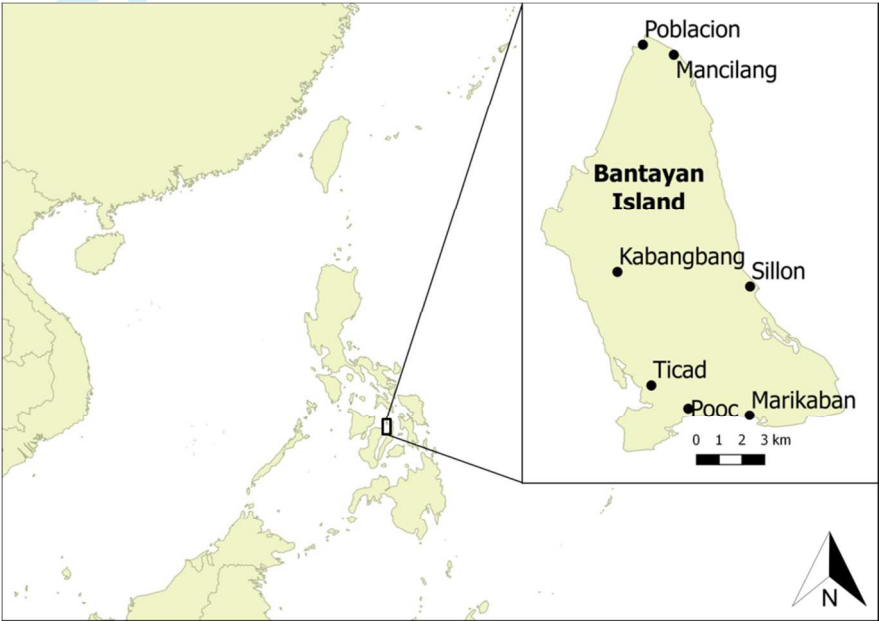
3.1 Case Study Site

On November 7, 2013, Super Typhoon Haiyan (known in the Philippines as Typhoon Yolanda) made landfall in the Visayas region of the Philippines. As one of the strongest storms ever recorded, the typhoon wreaked havoc as it traversed through the region, including the island of Bantayan, on the northern tip of Cebu province. The typhoon disaster resulted in approximately 8,000 deaths, affected over 12 million people and caused an estimated US \$12.9 billion in losses (World Bank, 2014). On Bantayan Island, the focus of this study, the typhoon caused significant damage, with power and

communication outages, destruction of approximately 30% of homes with many more suffering damage, and significant impacts on livelihoods due to loss of productive assets (Umbao, 2013).

In the course of the research, questionnaires were distributed in seven barangay locations on Bantayan Island (highlighted in Figure 1), representing each of the three municipalities: Madridejos, Santa Fe and Bantayan.

Figure 1: Map of Bantayan Island Study Area



Each of the barangay locations was selected to represent a range of village locations, including coastal and inland, with Table 1 providing a brief overview of the location and characteristics of each of the barangays sampled.

Table 1: Overview of Study Site Characteristics (from 2014)

Barangay	Population	Location	Damages	Livelihoods
Ticad, Bantayan	5,662 (1,513 hh)	Interior, larger urban centre with rural areas surrounding	957 houses destroyed	Mainly farming, followed by shop owners
Mancilang, Madridejos	5,314 (929 hh)	Mix of coastal and interior neighbourhoods, mainly urban	625 houses totally destroyed	Heavy reliance on fishing
Sillon, Bantayan	4,668 (937 hh)	Half rural interior, half coastal	Heavy damage	Mainly fishing, followed by farming
Poblacion, Madridejos	4,843 (889hh)	Mainly coastal	569 houses totally damaged, 159 partially damaged	Heavy reliance on fishing
Pooc,	686	Mainly rural interior, but	359 houses	Mainly fishing,

Santa Fe	households	some coastal	destroyed	followed by construction labour
Marikaban, Santa Fe		Larger interior area, but more populated in coastal regions	Most houses suffered collapsed roofs	Fishing, farming and labourers
Kabangbang, Bantayan	2550 (570 hh)	All interior, approx. 80% farming	375 houses destroyed	Mainly farming although minority fishing & labour

3.2 Data Collection

Data were collected over a period of four months, during January through April 2014. Questionnaire data were collected using a mix of non-random, convenience sampling methods. Approximately 500 questionnaires were distributed by visiting the main population centres on the island and inviting those accessible to participate, or through distribution by local pastors who disseminated the questionnaires to their congregants (approximately 150 questionnaires, or less than 8% of the sample was collected using this method). Relationships were also developed with seven barangay health centres, and questionnaires were distributed by health workers on our behalf (approximately 1400 questionnaires were completed this way). Donations to the health programs in each barangay community were made in appreciation of this assistance. The local barangay health workers were instructed to choose a proportionally representative sample in terms of age, gender and socio-economic status, although this was not possible in all cases. Health workers noted the reluctance of males to respond to the survey, resulting in over-representation of women. The questionnaires were translated into the local Cebuano language and completed independently, although in some cases assistance was provided to complete the questionnaire.

Data collection resulted in a sample of 1,929 responses with 29.5% male and 70.5% female. The average age of respondents was 43, although this ranged from 16 to 92. All respondents participating in the study belonged to a Christian denomination, mainly Roman Catholic, which is consistent with the religious make-up of Bantayan Island. Socio-economic status was self-reported by respondents based on their own perception of their current status. An overview of respondent characteristics is provided in Table 2.

Table 2: Characteristics of Survey Respondents (by valid percent)

Age	Education Level	Socio-economic Status	Barangay
16 – 29: 17.8%	No school: 2.3%	Poor: 66.4%	Ticad: 9.6%
30 – 39: 25.6%	Elementary: 46.8%	Just enough: 33.2%	Sillon: 14.7%
40 – 49: 25.5%	High school: 40.4%	Middle class: 0.4%	Mancilang: 12.4%
50 – 59: 16.6%	Vocational: 7.8%		Poblacion: 15.5%

60 – 69: 10.3% 70+: 4.0%	College: 2.4% Post-Graduate: 0.2%		Marikaban: 22.1% Pooc: 12.3% Kabangbang: 13.5%
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As this research is part of a larger research program examining faith-based responses to disaster, a number of interviews were also conducted on Bantayan Island. Although analysis of these interviews is not provided here, they do provide contextual information to help interpret the survey results.

3.3 Data Analysis

As this paper focuses on those respondents who expressed religious struggles in their relationship with God after the disaster, the data analysis focused on the questions in the survey related to these issues. The responses to each question were grouped into either ‘true’ or ‘not true’ categories (‘not at all typical of me’ and ‘not very typical of me’ were grouped as ‘not true’ responses and ‘somewhat typical of me’, ‘fairly typical of me’, and ‘very much typical of me’ were grouped as ‘true’ responses). This grouping allowed for statistical analysis on questions where response numbers for some categories were low. Once the groupings had been made, comparisons using chi-squared tests between those who expressed feelings of anger, confusion or apostasy and those who did not and their responses to the other questions in the survey were analyzed. Cramer’s V scores were calculated to provide an indication of the strength of association between the variables found to have statistically significant correlations. The seven questions related to emotional responses to God were then grouped to form a ‘Religious Struggles’ scale, and Pearson’s correlation was conducted to examine whether any experiences or beliefs were related to higher levels of negative responses.

4. Results

Table 3 and Figure 2 provide a summary of frequency counts for the ten questions exploring the relationship between respondents and God in the post-disaster context. From Table 3, it is clear that the vast majority of respondents indicated that their religious beliefs are stronger (96%) and that their relationship with God grew closer (92%) after the disaster, although the percentage of respondents who questioned their relationship with God was substantial (29% wondered whether God cared about them, over 13% had doubts about God’s existence, and 12% felt confused about God). The percentage of respondents who expressed anger or loss of faith was low (4% and 6% respectively).

Table 3: Frequency Counts of Relationship with God Questions

Question (After the typhoon disaster...)	n	Response	Frequency	Valid Percent
My religious beliefs are stronger	1,888	True	1,809	95.8
		Not True	79	4.2
I trust God more	1,898	True	1,819	95.8
		Not True	79	4.2
I felt closer to God	1,900	True	1,750	92.1
		Not True	150	7.9
I wonder if God cares about me	1,887	True	546	28.9
		Not True	1,341	71.1
I feel confused about God	1,890	True	234	12.4
		Not True	1,656	87.6
I feel anger towards God	1,884	True	77	4.1
		Not True	1,807	95.9
I have doubts about God's existence	1,880	True	252	13.4
		Not True	1,628	86.6
I no longer attend church services because of a loss of faith	1,863	True	171	9.2
		Not True	1,692	90.8
I lost my faith in God	1,894	True	116	6.1
		Not True	1,778	93.9
I no longer believe in God	1,888	True	116	6.1
		Not True	1,772	93.9

Figure 2: Percentage of Responses for Relationship with God Questions



Several demographic characteristics were analyzed, including: gender, age, Christian denomination, education, barangay location and socio-economic status (SES). There were no statistically significant differences between responses for the ten questions analyzed based on gender or age, although there were statistically significant differences in responses based on religious denomination, education, socio-economic status, and barangay location.

For the denominational analysis, denominations with small sample sizes (e.g. Iglesia ni Cristo with sample size of 8) and those who did not note a denominational or religious affiliation were merged into one 'other' category (representing 6.4% of respondents). The five main religious denominations were: Roman Catholic (65.8% of respondents), Independent Church of the Philippines (IFI)/Aglipay (13.9%), Seventh Day Adventist (SDA) (7%), Born Again (3.7%), and Baptist (3.4%). Three questions resulted in statistically significant associations based on different denominations, as highlighted in Figure 3.

Figure 3: Religious Denomination Chi-Squared Analysis Results

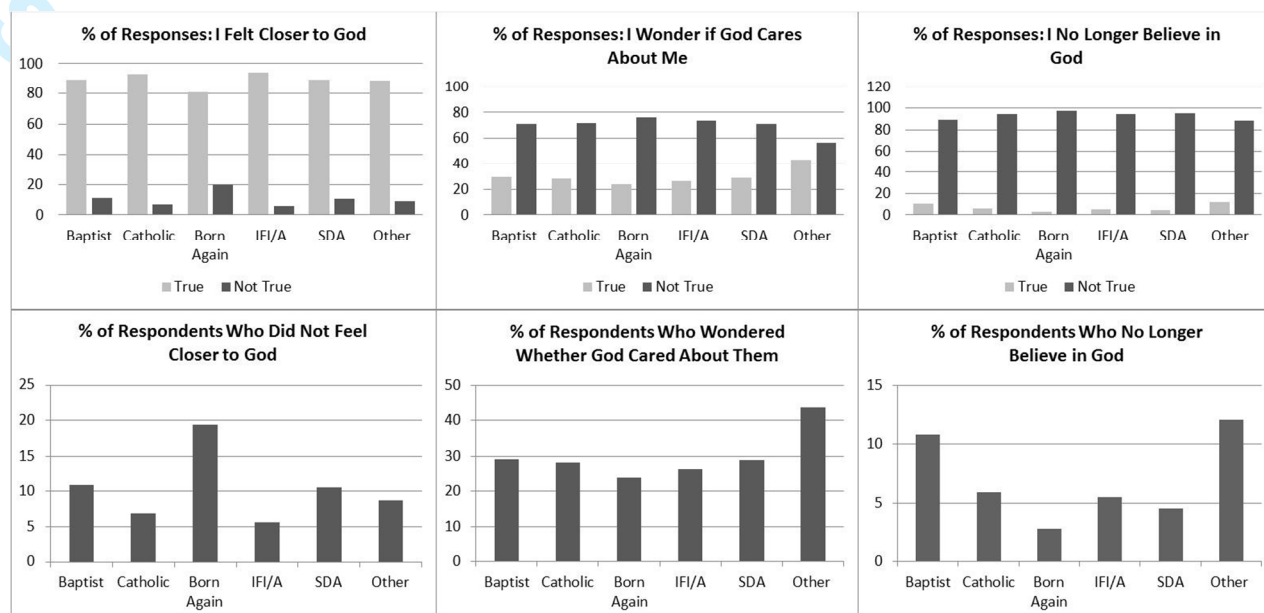


Figure 3a: 'I feel closer to God' (n = 1894) $\chi^2(1) = 20.300, p = .001$. Strength of association indicated a weak association, Cramer's V = 0.104, $p = .001$. All expected cell frequencies were greater than five.

Figure 3b: 'I wonder if God cares about me' (n = 1880) $\chi^2(1) = 13.865, p = .016$. Strength of association indicated a weak association, Cramer's V = 0.086, $p = .016$. All expected cell frequencies were greater than five.

Figure 3c: 'I no longer believe in God' (n = 1881) $\chi^2(1) = 11.626, p = .040$. Strength of association indicated a weak association, Cramer's V = 0.079, $p = .040$. Two cells had expected frequencies less than five.

The results of the analysis indicate a weak association for all three questions, although Born Again Christians were twice as likely to indicate not feeling closer to God compared to the average (19.4% vs 7.9%). Roman Catholics and IFI/Aglipays were the least likely to report not feeling closer to God (6.9% and 5.7% respectively). Born Again Christians were the least likely to wonder whether God cared about them (23.6%) whereas Baptists, Seventh Day Adventists and Roman Catholics were the most likely (29.2%, 28.9%, and 28.3% respectively). Baptists were the most likely to report a loss of faith in God after the typhoon disaster (10.8%), whereas Born Again Christians were the least likely (2.8%).

For the education analysis, two questions had statistically significant results, as highlighted in Figure 4. There was a small association with the level of education, with those having the highest levels of education being least likely to wonder whether God cared for them. Percentages reporting as wondering whether God cared about them are: those with no schooling (35.7%); elementary school (32.7%); high school (27.7%); and higher levels of education (18.9%). Those with elementary (13.5%) and high school (15.4%) education were almost three times more likely to have doubts about God's

existence compared to those with no schooling (4.7%) and 1.5 times more likely to have doubts compared to those with higher levels of education (9.7%).

Figure 4: Educational Level Chi-Squared Analysis Results

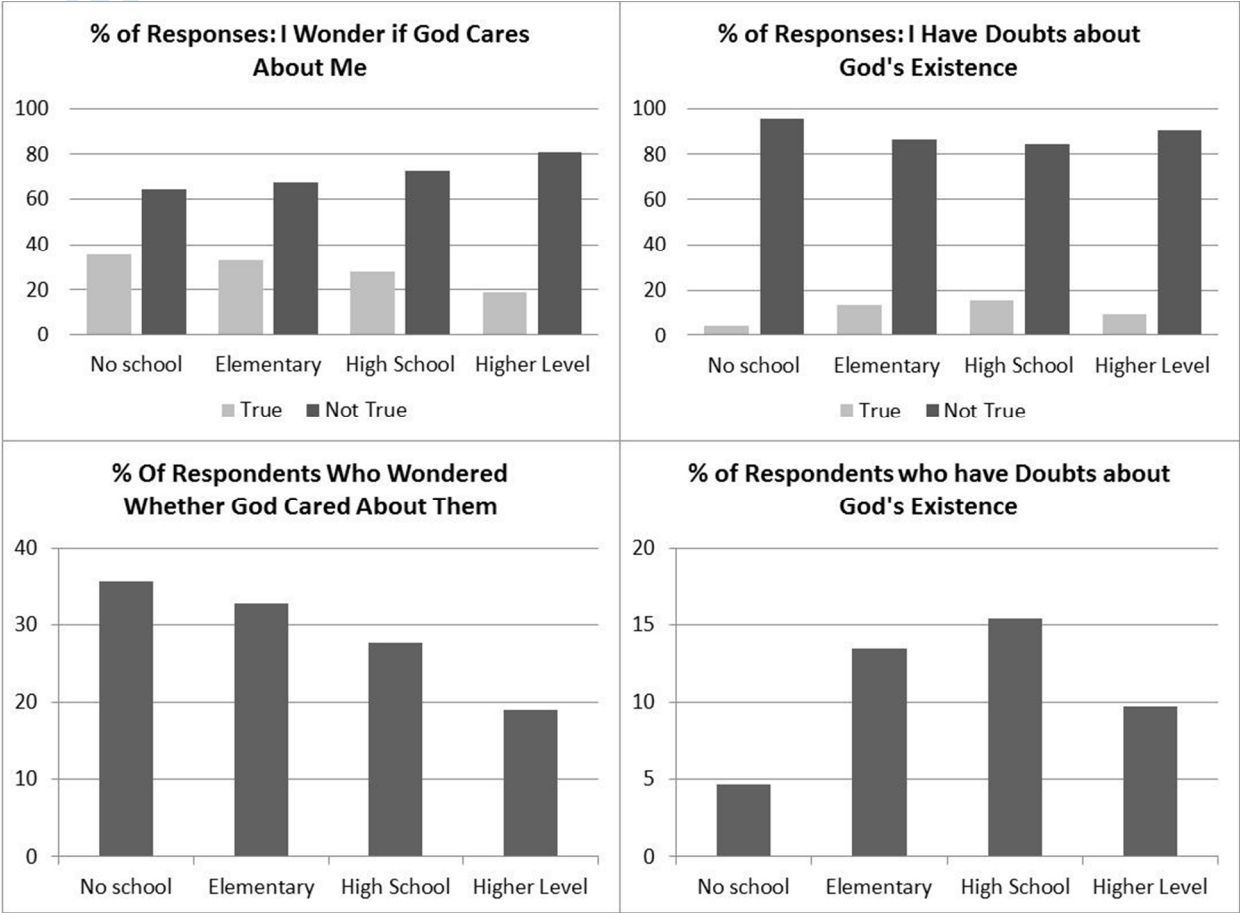


Figure 4a: 'I wonder if God cares about me' (n = 1780) $\chi^2(1) = 18.582, p = .000$. Strength of association indicated a weak association, Cramer's $V = 0.102, p = .000$. All expected cell frequencies were greater than five.

Figure 4b: 'I have doubts about God's existence' (n = 1775) $\chi^2(1) = 7.975, p = .047$ Strength of association indicated a weak association, Cramer's $V = 0.067, p = .047$. All expected cell frequencies were greater than five.

For the socio-economic status analysis, responses were divided into the following categories: poor, just enough, and middle class. Most questions did not result in statistically significant results although the sample size for the middle class category was only seven, thus limiting the reliability of the results. Figure 5 highlights the results of the analysis on the three questions that had statistically significant associations based on education levels.

Figure 5: Socio-Economic Status Chi-Squared Analysis Results

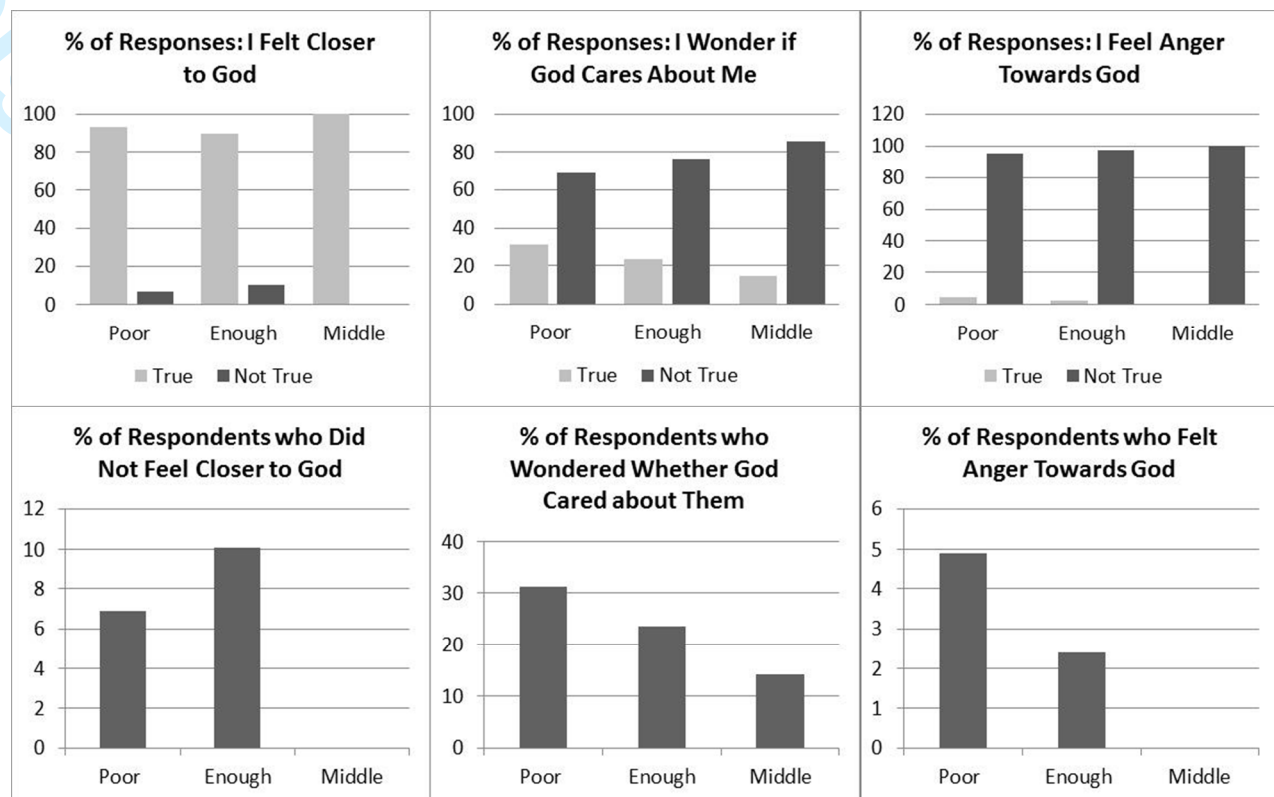


Figure 5a: 'I feel closer to God' (n = 1879) $\chi^2(1) = 6.274$, $p = .043$. Strength of association indicated a weak association, Cramer's $V = 0.058$, $p = .043$. One cell had an expected frequency less than five.

Figure 5b: 'I wonder if God cares about me' (n = 1866) $\chi^2(1) = 12.764$, $p = .002$. Strength of association indicated a weak association, Cramer's $V = 0.083$, $p = .002$. One cell had an expected frequency less than five.

Figure 5c: 'I feel anger towards God' (n = 1863) $\chi^2(1) = 6.862$, $p = .032$. Strength of association indicated a weak association, Cramer's $V = 0.061$, $p = .032$. One cell had an expected frequency less than five.

From the analysis, poorer respondents were more likely to feel less close to God, to wonder whether God cared about them or to feel anger towards God compared to middle class respondents, although all associations were rather small. Those individuals in the 'just enough' category were the least likely to feel closer to God (poor (6.9%), just enough (10.1%), middle class (0%)). Poorer individuals were more likely to express feelings of wondering whether God cared (poor (31.2%), just enough (23.5%), middle class (14.3%)). The poorest individuals were also the most likely to express feelings of anger towards God, although in all cases the percentages are very small.

For the barangay location analysis, only responses from the seven barangay locations were analyzed for associations (the remaining respondents were sampled in the main population centres on Bantayan Island and represented a range of locations from across the island, thus limiting the validity of any results). Three questions were statistically significantly different based on the barangay, as highlighted in Figure 6, although all associations were small. For all three questions, barangay Ticad, Poblacion

and Pooc had a higher percentage of respondents indicating some degree of religious struggle: 16.4% of Ticad respondents, 10.4% of Poblacion respondents, and 10.9% of Pooc respondents did not feel closer to God after the disaster, compared to only 2.9% of respondents in Mancilang and 3.2% of respondents in Kabangbang. Further, 9.8% of Ticad respondents and 10.9% of Pooc respondents indicated that they no longer attended church services because of a loss of faith and 7.4% of respondents in Poblacion and 7.6% of Pooc respondents did not feel their religious beliefs are stronger.

Figure 6: Barangay Location Chi-Squared Analysis Results

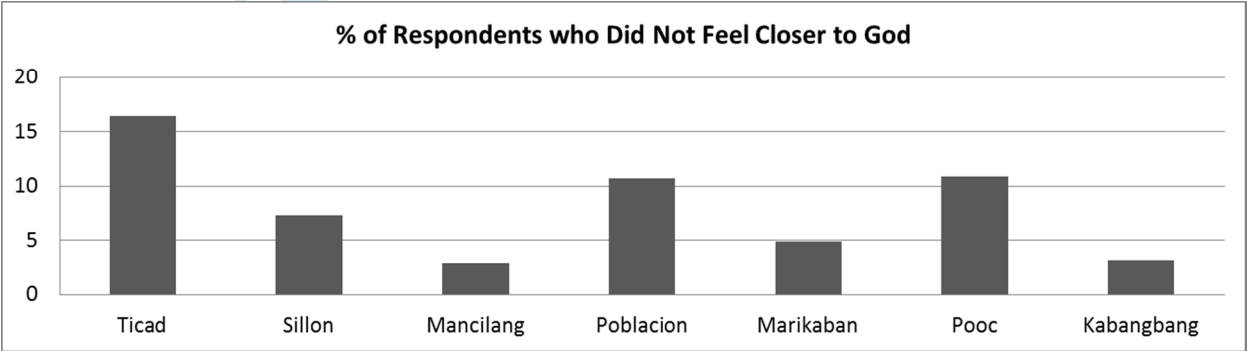


Figure 6a: 'My religious beliefs are stronger' (n = 1392) $X^2(1) = 15.002$, $p = .020$. Strength of association indicated a weak association, Cramer's V = 0.104, $p = .020$. All expected cell frequencies were greater than five.

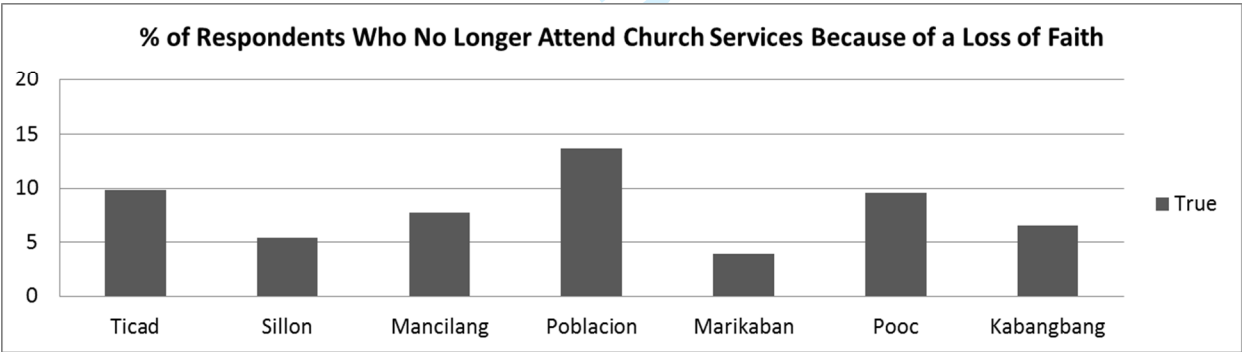


Figure 6b: 'I felt closer to God' (n = 1401) $X^2(1) = 34.924$, $p = .000$. Strength of association indicated a weak association, Cramer's V = 0.158, $p = .000$. All expected cell frequencies were greater than five.

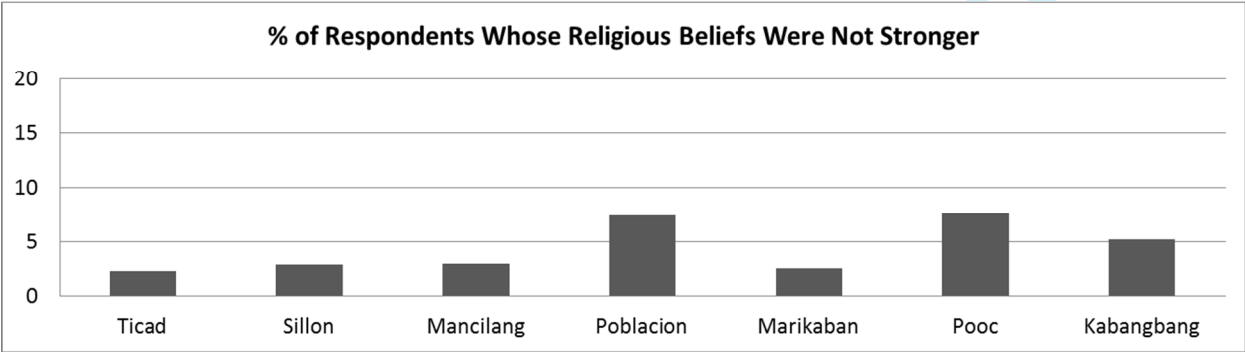


Figure 6c: 'I no longer attend church services because of a loss of faith' (n = 1366) $X^2(1) = 19.706$, $p = .003$. Strength of association indicated a weak association, Cramer's V = 0.120, $p = .003$. All expected cell frequencies were greater than five.

In order to examine whether there were correlations between the respondents who expressed feelings of confusion, anger or apostasy towards God following the disaster, the seven questions indicative of religious struggles were merged into one construct scale. The scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.773. The Religious Struggles scale was then compared to the remaining questions on the survey. A Pearson's correlation was conducted in order to measure the strength and direction of the relationship between the scale and other questions. Any results that were statistically significant at the 0.01 level and had a minimum of a moderately small correlation ($r < 0.2$) (adapted from Cohen's 1988 guidelines) are shown in Table 4.

Table 4: Pearson's Correlation between Religious Struggles and Other Questions

Question	Pearson's Correlation	Significance
I lost loved ones in the typhoon disaster.	-.279	.000
I don't think about God in these disaster situations.	.232	.000
The format of worship took the disaster and our trauma into consideration.	-.289	.000
I rarely attend church services	.209	.000

Most of the correlations are small, although the strongest correlations are associated with loss of loved ones, not thinking about God in disaster situations, worship not taking trauma into consideration and respondents who rarely attend church services. This suggests that there are factors, or personal experiences that can influence religious struggles in the post-disaster context.

5. Discussion

The overwhelming response among Christians after the typhoon was that they reported that their religious beliefs were stronger (96%), that they trusted God more (96%) and that they felt closer to God (92%). This aligns with attachment theory understandings of the role that faith plays in traumatic and stressful situations, whereby a relationship with God can offer "a safe haven, a being who offers caring and protection in times of stress" (Hill and Pargement, 2003, p.67). However, in the rest of this discussion we focus on the more negative feelings that were reported.

Our results indicate that feelings of confusion or questioning of God in the post-disaster context is not unusual, although the number of individuals explicitly expressing feelings of anger and loss of faith is small. This suggests that although respondents may question their relationship with God or God's purpose as they try to interpret and understand their losses associated with the disaster, their overall faith remains intact.

This is similar to the findings of other studies where the percentage of respondents expressing anger towards God was low (i.e. under 10%) (Roussos et al., 2005).

One factor that may influence the results is the potential reluctance of respondents to express feelings of anger or apostasy after a disaster. Exline and Grubbs (2011) found that those who admitted to feelings of anger towards God may be stigmatized by family and friends, and respondents were less likely to report feelings of anger towards God if they believed it to be morally wrong. This suggests that feelings of anger could potentially be under-reported. Interestingly, those who expressed feelings of anger towards God and received supportive responses from family and friends also reported greater spiritual engagement in the longer term (Exline and Grubbs, 2011). This indicates that working through religious struggles can help with the healing process, whereas those who indicated they received unsupportive responses reported a higher degree of ongoing anger, doubt and rejection of God (Exline and Grubbs, 2011). This point is particularly relevant for churches and for pastoral care in the context of post-disaster recovery: allowing individuals to express their feelings and emotions openly and without judgement, while still providing spiritual support is important for allowing individuals to work through their religious struggles with more positive outcomes (Abbott, 2012).

In terms of factors that may influence religious struggles, unlike other studies, gender was not found to be a significant factor influencing responses, although denomination, socio-economic status, education level and barangay location were. There were some significant differences in religious struggles in respondents' relationship with God based on denomination. For example, Born Again Christians were over twice as likely to report not feeling closer to God compared to the average, the least likely to wonder whether God cared about them and the least likely to lose their faith after the disaster. It is possible that Born Again Christians may feel less inhibited in their relationship with God and therefore less inclined to feel God might not be able to cope with their complaints. That is, they may feel a greater liberty to express their lament in these ways, especially since they were least likely to lose their faith after the disaster. On the other hand, Born Again Christians may already feel close to God, and accept the disaster as God's will, thereby resulting in the disaster having less impact on their faith and relationship with God. Other research has also noted that religious leaders can exert influence over their congregation, so there may be some differences in responses based on how the disaster is framed and interpreted by religious leaders within different denominations (Joakim and White, 2015).

Those who were poorer and those who had lower levels of education were more likely to report doubts, confusion and anger towards God. Further analysis indicated that this could be related to a number of factors based on statistically significant associations between education and socio-economic status and some of the other questions in the survey. Poorer respondents and those with lower levels of education reported greater damages to their homes and livelihoods, and were more likely to report damage to their churches, affecting their religious leaders and their ability to attend services. This may influence the degree of religious struggles and more negative responses to God, as previous research has highlighted the connection between the degree of damage and loss experienced and the likelihood of experiencing negative emotional responses towards supernatural agents (Aten et al., 2012; Hussain et al., 2011; Seirmarco et al., 2012).

The poor and less educated were also more likely to believe that the typhoon disaster was punishment for sinful people and past mistakes, as well as being more likely to pray during the disaster and believe that prayer can avert disaster. This is similar to other research findings, where poorer respondents were more likely to express feelings of fatalism, lower sense of control, and greater sense of divine control, compared to individuals with adequate income levels (Mittag and Griskevicius, 2014; Cidade et al., 2016). Further, poorer respondents were less likely to report receiving pastoral care compared to middle class respondents (71% and 85% respectively) and less likely to indicate that the format of worship took their trauma into consideration compared to middle class respondents (44% and 57% respectively). This suggests that there are likely to be intersecting and complicating factors related to education and poverty that impact an individuals' relationship with God and could be contributing to feelings of doubt, confusion and anger towards God.

The barangay location was also a significant factor influencing religious struggles – there were differences in the number of people who lost loved ones in each barangay (e.g. respondents in Marikaban and Pooc were twice as likely to report losing a loved one compared to Mancilang and Poblacion); since loss of loved ones was correlated to God anger, this is likely to be an influencing factor. This could also be related to differences in post-disaster church fellowship meetings in each barangay (e.g. damage to churches limiting the ability to meet together). Other influencing factors related to barangay differences could be related to political leadership and recovery responses in each barangay (i.e., some barangays were able to provide greater assistance for recovery compared to others; some barangay leaders enforced no-rebuilding zones along the coast whereas others were less restrictive), urban versus rural nature of some

of the barangays, and impact on livelihood activities (e.g., some barangays were more dependent on fishing compared to others). These influences are speculative as further research would be needed to link some of the contextual factors between the different locations and the experience of religious struggles.

In terms of the specific experiences that may have contributed to religious struggles in the post-disaster context, three specific factors had the strongest correlation with religious struggles. First, those who experienced loss of a loved one were more likely to report religious struggles: 46% of those who expressed anger towards God had lost a loved one in the disaster, compared to 7% of those who did not express God anger. This finding is similar to other research that highlighted that the degree of loss was an important factor influencing post-disaster anger and trauma (Aten et al., 2008). For example, in a study after a major flood in Hat Yai, Thailand, respondents were twice as likely to experience mental health problems if they perceived that the flood had caused severe personal loss or if someone they knew had been killed in the flood (Assanangkornchai et al., 2004). This suggests that human losses in particular can have a significant influence on one's relationship with God, compared to general property and asset losses.

Another important factor related to religious struggles was the format of corporate worship meetings following the disaster. There was a positive correlation between feeling that the format of worship did not take into consideration the trauma associated with the disaster and religious struggles. Further, there was also a weak positive correlation between not being able to attend church services after the disaster and religious struggles ($r = -.181, p = .000$). This suggests that a survivor's ability to practice their faith, in a manner that takes the recent trauma into consideration, is important in helping to promote positive religious responses and to support emotional and psychological recovery. This point is important for both religious and humanitarian organizations; in many disasters, relief and recovery organizations lack coordination with churches and faith-based services, even though it is acknowledged that religious organizations provide significant social and emotional support for survivors (Alawiyah et al., 2011). Further, many respondents may be unwilling to seek emotional and psychological support from organizations that are not faith-based (Alawiyah et al., 2011), which suggests that faith-based organizations are likely to comprise a significant source of support for impacted individuals. Thus, ensuring consideration of the role that faith institutions play in helping support recovery for impacted individuals of faith, and ensuring that these institutions receive relief and recovery support should be viewed as part of the overall recovery process.

The final factor was related to the importance of God as perceived by individuals prior to the disaster. Religious struggles and poorer relationships with God were correlated to lack of attendance at worship services and not thinking about God during the disaster. Previous studies have reported that individuals who feel a more secure attachment to God are likely to experience greater comfort from their faith in times of stress (Hill and Pargament, 2003) and less likely to express feelings of anger towards God (Exline et al., 2011). The research results here support these findings, as those who articulated more negative post-disaster responses towards God tended to rank the importance of their faith lower than those who found greater comfort in their faith. Considering that religious struggles seems to contribute to spiritual growth for some, the disaster experience could represent a 'fork in the road' in an individuals' spiritual journey (Hill and Pargament, 2003). For some, experiencing feelings of anger and distrust towards God could lead to a further moving away from their faith and spirituality, whereas for others, this could contribute to a maturation and deeper relationship with God in the future. Further research could help to understand better the long-term outcomes of religious struggles, and the factors that impacted the directionality of an individual's spiritual journey.

6. Conclusion

Our research found that the religious faith of Christians was overwhelmingly enhanced by their experience of Typhoon Haiyan. Struggling with their relationship with God among Christians after the typhoon was generally low, although a variety of factors seem to have an influence on this, including: education levels, socio-economic status, religious denomination, barangay location, loss of loved ones in the disaster, format of post-disaster church fellowship meetings, and the importance of God in their lives prior to the disaster. Although the number of individuals expressing anger and apostasy was low, a significant proportion of respondents did express feelings of confusion about God and wondered whether God cared about them. Having an appropriate and supportive faith-based environment to work through these feelings is important for supporting emotional and psychological recovery after the disaster. As religious institutions often form an important component of the community, better coordination between relief/recovery responders and religious institutions can help support holistic assistance (Koenig, 2006; Aten and Boan, 2016). Providing such assistance can help individuals work through their religious struggles, allowing for spiritual growth, instead of making people feel that they should be ashamed of such feelings (Abbott, 2012).

Although this study highlighted religious struggles after disaster, it is also important to note that these feelings are dynamic; for example, in a previous study, a number of

respondents interviewed approximately five years after a major disaster reported that they had experienced feelings of confusion and anger towards God in the immediate period following the disaster, although they had since worked through these feelings and felt closer to God (Exline et al., 2011). Further longitudinal research could help confirm whether respondents may have an easier time expressing their feelings of anger towards God once they have 'recovered' from the initial trauma and loss and repaired their relationship with God, and highlight any longer term benefits of religious struggles (Abu-Raiya et al., 2016).

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ⁱ We recognize that there are differences between the terms faith, spirituality and religious beliefs. For example, religion and religious beliefs have often been used to refer to the formalized and institutionalized structures and traditions related to specific faiths whereas spirituality has been "increasingly used to refer to the personal, subjective side of religious experience" (Hill & Pargament, 2003, p. 64). We use these terms interchangeably throughout this paper in an attempt to be inclusive of the various ways in which individuals experience their beliefs, and to recognize the difficulty in differentiating the social and communal impact of spiritual expression.

ⁱⁱ As the research focuses on Christian responses to disaster, we have used the term God to represent belief in a supernatural agent.

ⁱⁱⁱ Stress related growth refers to the positive outcomes derived over time from the experience of stressful and traumatic events, including "changes in life philosophy and personality (broadly defined), changes in

social relationships (including perhaps more appreciation of the value of close friends and family), and more adaptive coping behavior” as well as deeper spiritual engagement (Park et al., 1996, p. 73).

^{iv} The survey instrument was designed to explore a number of different concepts, with scales focused on exploring survivors relationships with God, relationships with their community, and relationships to the environment. The focus of this paper is on relationships with God, particularly those who experienced struggles in their relationship with God.